

§ 111.99-5

46 CFR Ch. I (10-1-13 Edition)

§ 111.99-5 General.

Fire door release systems, if installed, must meet regulation II-2/30.4.3 of IMO SOLAS 74 (incorporated by reference; see 46 CFR 110.10-1).

[USCG-2003-16630, 73 FR 65199, Oct. 31, 2008]

Subpart 111.101—Submersible Motor-Driven Bilge Pumps

§ 111.101-1 Applicability.

This subpart applies to each submersible motor-driven bilge pump required on certain vessels under 46 CFR 56.50-55.

[USCG-2003-16630, 73 FR 65199, Oct. 31, 2008]

§ 111.101-3 General requirements.

(a) Each electric motor driving a submersible bilge pump must be in an open end air bell of rugged construction and be of a size that does not allow water to enter the motor if the compartment that the motor is in is flooded to the uppermost continuous deck.

(b) The motor, if of the open type, must be protected from splashing water from the bottom.

(c) The cable to each motor must enter through the open bottom of the air bell.

(d) Each motor must be able to operate continuously at rated load under any condition, dry or with water in the air bell at any level up to the maximum allowed under paragraph (a) of this section.

(e) Each motor controller must be above the uppermost continuous deck. There must be a master switch at the controller and a master switch at the motor. The master switch at the motor must be disconnected from the circuit when the motor is started or stopped from the master switch at the controller.

(f) Each motor must be energized from the final emergency power source.

Subpart 111.103—Remote Stopping Systems

§ 111.103-1 Power ventilation systems except machinery space ventilation systems.

Each power ventilation system must have:

(a) A control to stop the ventilation that is:

(1) Outside the space ventilated; and
(2) Grouped with the controls for every power ventilation system to which this section is applicable; and

(b) In addition to the control required by paragraph (a), a stop control that is:

(1) As far as practicable from the control required by paragraph (a) and grouped with the controls for every power ventilation system to which this section is applicable; or
(2) The circuit breakers for ventilation grouped on the main switchboard and marked, "In Case of Fire Trip to Stop Ventilation."

NOTE: The requirements of this section do not apply to closed ventilation systems for motors or generators, diffuser fans for refrigerated spaces, room circulating fans, or exhaust fans for private toilets of an electrical rating comparable to that of a room circulating fan.

§ 111.103-3 Machinery space ventilation.

(a) Each machinery space ventilation system must have two controls to stop the ventilation, one of which may be the supply circuit breaker.

(b) The controls required in paragraph (a) of this section must be grouped so that they are operable from two positions, one of which must be outside the machinery space.

§ 111.103-7 Ventilation stop stations.

Each ventilation stop station must:

(a) Be protected by an enclosure with a glass-paneled door on the front;

(b) Be marked, "In Case of Fire Break Glass and Operate Switch to Stop Ventilation;"

(c) Have the "stop" position of the switch clearly identified;

(d) Have a nameplate that identifies the system controlled; and

(e) Be arranged so that damage to the switch or cable automatically stops the equipment controlled.

§ 111.103-9 Machinery stop stations.

(a) Each forced draft fan, induced draft fan, blower of an inert gas system, fuel oil transfer pump, fuel oil unit, fuel oil service pump, and any other fuel oil pumps must have a stop

Coast Guard, DHS

§ 111.105–11

control that is outside of the space containing the pump or fan.

(b) Each stop control must meet § 111.103–7.

Subpart 111.105—Hazardous Locations

§ 111.105–1 Applicability; definition.

This subpart applies to installations in hazardous locations as defined in NFPA NEC 2002 and in IEC 60079–0 (both incorporated by reference; see 46 CFR 110.10–1). As used in this subpart, “IEC 60079 series” means IEC 60079–0, IEC 60079–1, IEC 60079–2, IEC 60079–5, IEC 60079–6, IEC 60079–7, IEC 60079–11, IEC 60079–15, and IEC 60079–18 (all incorporated by reference; see 46 CFR 110.10–1).

[USCG–2003–16630, 73 FR 65199, Oct. 31, 2008, as amended by USCG–2013–0671, 78 FR 60153, Sept. 30, 2013]

§ 111.105–3 General requirements.

All electrical installations in hazardous locations must comply with the general requirements of section 33 of IEEE 45–1998 (incorporated by reference; see 46 CFR 110.10–1), and with either Articles 500 through 505 of NFPA NEC 2002 (incorporated by reference; see 46 CFR 110.10–1) or with the IEC 60079 series (as defined in 46 CFR 111.105–1 and incorporated by reference; see 46 CFR 110.10–1). When installations are made in accordance with NFPA NEC 2002 articles, and when installed fittings are approved for the specific hazardous location and the cable type, marine shipboard cable that complies with 46 CFR subpart 111.60 may be used instead of rigid metal conduit.

[USCG–2003–16630, 73 FR 65199, Oct. 31, 2008]

§ 111.105–5 System integrity.

In order to maintain system integrity, each individual electrical installation in a hazardous location must comply specifically with Articles 500–505 of NFPA NEC 2002 (incorporated by reference; see 46 CFR 110.10–1), as modified by 46 CFR 111.105–3, or with the IEC 60079 series (as defined in 46 CFR 111.105–1 and incorporated by reference; see 46 CFR 110.10–1), but not in combination in a manner that will compromise system integrity or safety.

Hazardous location equipment must be approved as suitable for use in the specific hazardous atmosphere in which it is installed. The use of nonapproved equipment is prohibited.

[USCG–2003–16630, 73 FR 65200, Oct. 31, 2008]

§ 111.105–7 Approved equipment.

When this subpart or NFPA NEC 2002 (incorporated by reference; see 46 CFR 110.10–1) states that an item of electrical equipment must be approved, or when IEC 60079–0 (incorporated by reference; see 46 CFR 110.10–1) states that an item of electrical equipment must be tested or approved in order to comply with the IEC 60079 series (as defined in § 111.105–1 and incorporated by reference; see 46 CFR 110.10–1), that item must be—

(a) Listed or certified by an independent laboratory as approved for use in the hazardous locations in which it is installed; or

(b) Purged and pressurized equipment that meets NFPA 496 (incorporated by reference; see 46 CFR 110.10–1) or IEC 60079–2.

[CGD 94–108, 61 FR 28284, June 4, 1996, as amended by USCG–2003–16630, 73 FR 65200, Oct. 31, 2008]

§ 111.105–9 Explosion-proof and flame-proof equipment.

Each item of electrical equipment required by this subpart to be explosion-proof under the classification system of NFPA NEC 2002 (incorporated by reference; see 46 CFR 110.10–1) must be approved as meeting UL 1203 (incorporated by reference; see 46 CFR 110.10–1). Each item of electrical equipment required by this subpart to be flame-proof must be approved as meeting IEC 60079–1 (incorporated by reference; see 46 CFR 110.10–1).

[USCG–2003–16630, 73 FR 65200, Oct. 31, 2008]

§ 111.105–11 Intrinsically safe systems.

(a) Each system required by this subpart to be intrinsically safe must use approved components meeting UL 913 or IEC 60079–11 (both incorporated by reference; see 46 CFR 110.10–1).

(b) Each electric cable of an intrinsically safe system must—

(1) Be 50 mm (2 inches) or more from cable of non-intrinsically safe circuits,